

A study on health conditions of sanitary workers in salem corporation

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ABSTRACT

The workers involved in the task of disposing waste in a hygienic manner were known as sanitary workers. Their nature work poses severe health threat to them, since they are handling hazardous and pathogenic wastes. In the developing countries like India, their conditions are still more pathetic. The sanitary workers were handling wastes without any safety measures and sanitary materials. Though many municipal corporations, engaged in the task of solid waste management have offered safety materials to sanitary workers, due to their ignorance and illiteracy the workers failed to use such materials. Thus due to their practice of unhygienic handling of waste they are vulnerable to many health risks. At this back drop this paper aimed to analyse the health conditions of sanitary workers in Salem Corporation, Tamil Nadu.

Key words: Sanitary Workers, Waste Collection, Sanitary Equipments and Health Conditions

Introduction

Sanitation work refers to the task of disposing waste in a hygienic manner to avoid diseases. The workers involved in sanitation work were referred as sanitary workers. Traditionally the name assigned to them was scavengers. It has changed into sanitary workers as per the government order issued in the year 1995. Though the people from all community may join this job as per the order issued by the Tamil Nadu Government, majority who join this job were from scheduled caste. Even though the other community people joined the work, they send SC workers to do their job by giving them a meager amount. The task of manual scavenging has been eradicated in Tamil Nadu under the Prohibition of Employment as Manual Scavengers and their Reha-

bilitation Act, 2013. In Tirunelveli District of Tamil Nadu State, a scheme viz. Project New Wings has been introduced in the month Januray 2018, to uplift the children of the sanitary workers by giving them assistance like education, skill development, entrepreneurship and healthcare (The Hindu, 2018¹).

The working conditions of the sanitary workers were very pathetic. They have to handle wastes without masks, gloves and boots. They have been given only brooms and tin plates for handling wastes. Due to their practice of unhygienic handling of waste they are vulnerable to many health risks. Thus the improper management of solid waste has not only been a risk to environment but also to workers engaged in handling the wastes. Both direct and indirect health risks have been posed to

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sanitary workers by the unhygienic way of handling of wastes without proper safety protectors.

Health Status of Sanitary workers

The health risk posed to sanitary workers has been very serious since they have to handle hazardous and pathogenic waste. Since they have been involved in the task of collecting, transporting, storing and disposing of solid waste, they are vulnerable to huge range of infections and sicknesses (Sukanya *et al.*, 2015). The health ailments reported by them include skin disease, eye problems, respiratory infections, abdominal disorders, jaundice etc (Tiwari, 2008). Majority of the sanitary workers employed in local bodies have been unaware of their health risks.

At this outset the present study attempted to study the socio – economic and health conditions of sanitary workers in Salem Corporation.

1. To study socio economic conditions of sanitary workers in study area
2. To analyse the occupational health risks of sanitary workers in study area

Thus the present study chiefly attempted to analyse the impact of waste handling on the health of the sanitary workers.

Hypotheses

- Sanitary workers handling wastes with sanitary materials were less affected by occupational health hazards.
- Collection of more wastes from more number of houses had a more impact on the health of the sanitary workers.

Methodology

The present study attempts to study demographic, socio – economic and health of conditions of sanitary workers in Hasthampatty Zone of Salem Corporation. There are 75 workers employed in the zone of which 35 are appointed by corporation and remaining 40 were contract workers. The present study attempts to include 40 sanitary workers employed in the zone as a sample. The sample consists both corporation and contract workers. A simple random sampling has been used to select the sample.

On studying the health conditions of the sanitary workers, age is the prime factor in determining health status. Majority of the sanitary workers were found to be in the middle age group i.e. 36 – 45. None of the respondents were below the age 25.

Table 1. Age of the Sanitary Workers

Age	No. of Workers
< 35 Years	5
36 to 45	28
46 to 55	6
Above 55	1
Total	40

Table 2. Level of Literacy

Literacy level	No. of Workers
Literate	22
Illiterate	18
Total	40

Education is an important factor to access the skill of the respondents regarding the impact of solid waste. Though many of the sanitary workers were found literate, majority of them were just able to put their signature only. Only very few have completed their secondary and higher secondary level. Surprisingly only one sample worker had completed his graduation.

Table 3. Community Particulars of Sanitary Workers

Community	No. of Workers
SC	10
SC (Ar)	28
MBC	2
Total	40

In the study, the two sanitary workers from most backward community were corporation workers. All Contract workers were found to be from SC community.

There is no difference in the nature and burden of work among the corporation and contract workers. There had been a huge difference in the amount of salary paid between these two categories of employees. The contract workers have been paid around Rs. 5000 per month. On the other hand corporation workers had a earning in the range of 10000 to 30000 based on their years of experience.

Surprisingly all the sanitary workers have been given sanitary materials like gloves, caps, and boots for handling wastes, but only very few were found using them. This attitude of the sanitary workers shows their ignorance and unawareness about the ill effects of the non usage of sanitary materials. Majority of the sanitary workers were affected by

Table 4. Cross Tabulation between Mode or Employment and Monthly Income

Mode of Employment	Details of Monthly Income				Total
	<10000	10001 – 20000	20001 – 30000	>30001	
Corporation	0	16	9	1	26
Contract	14	0	0	0	14
Total	14	16	9	1	40

Table 5. Cross Tabulation between Usage of Sanitary Materials and Number of Sanitary Workers affected by Diseases

Usage of Sanitary Material	Details of Sanitary Workers affected by Diseases		Total
	Yes	No	
Yes	1	4	5
No	35	0	35
Total	36	4	40

any one of the diseases due to their work. The diseases largely affecting them include skin diseases, eye irritations, abdominal discomforts, respiratory problems, skeletal disorders like neck, upper back and lower back pain and infections like hepatitis and leptospirosis.

H_0 = There is no significant difference between the health conditions of the sanitary workers working with and without sanitary materials.

In the above table describing the results of independent t test, the P value of Levene’s test was found to be less than 0.001. It shows that the health conditions of sanitary workers working with sanitary materials are significantly different from those who were not working with sanitary materials. Since the P value of t - test is less than the significance level the null hypothesis can be rejected and it can be concluded that the health conditions of sanitary workers working with sanitary materials are significantly different from those who were not working with sanitary materials.

The categories of work involved in waste management are collection, transportation recycling of

waste. The nature of work done by the collected sample is explained in the following table.

Majority were found to be engaged in door to door collection of waste. Women were allotted mostly the task of door to door collection and street sweeping. Men were used to be allocated the tasks like sewage cleaning, public toilet cleaning and loading of wastes.

Table 7. Nature of Work

Nature of work	No. of Workers
Sweeping	4
Door to Door Collection	25
Loading	4
Public Toilet Cleaning	2
Sewage Cleaning	5
Total	40

H_0 = There is no significant relationship between the health conditions of the sanitary workers collecting wastes from more and less number of houses.

The above reveals that majority sanitary workers collecting wastes from large number of houses in range of 40 – 60 were affected by any one of diseases due to their work. The above table reveals the significant association between the health conditions of the sanitary workers collecting wastes from more and less number of houses ($p < 0.005$).

The sample workers have complained that the corporation had failed to conduct frequent medical camps to treat their health hazards. They failed to avail any special occupational health service offered by the Government.

Table 6. Independent Sample t Test

Details of Sanitary Workers affected by Diseases	Details of Sanitary Workers working with Sanitary Materials	Levene’s Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	t	df	Sig. (2-tailed)
	Equal Variance assumed	59.111	.000	11.533	38	.000
	Equal Variance not assumed			4.000	4.000	.016

Table 8. Cross Tabulation between Number of Houses covered for Waste Collection and Details of Sanitary Workers affected by Diseases

Number of Houses covered for Waste Collection	Details of Sanitary Workers affected by Diseases		Total
	Yes	No	
<40	7	4	11
41 – 60	23	0	23
61 - 80	4	0	4
>81	2	0	2
Total	36	4	40
Pearson Chi – Square Value		11.717	
P – value		0.003	

Table 9. Treatment for the Sanitary Workers

Medical Treatment	No. of Workers
Government	8
Private	20
Both	12
Total	40

Conclusion

The working conditions of sanitary workers remain virtually unchanged over a long period of time. By the virtue of their occupation they are exposed to many health hazards. The medical and legislative measures have to be used wisely to prevent their social and health problems. An effective occupational health service is the need of the hour to be developed. The sanitary workers have to be educated about the basic hygienic practices. The significance of the usage of sanitary materials has to be accomplished to sanitary workers.

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